

WHAT IS CLAIMED IS:

30A 1. In an XML-based document which includes text delimited by plural element types respectively defining at least vector graphic shapes, images and text, each element type having an opening tag and a corresponding closing tag which collectively conform to a document type definition that defines rules for the plural element types, the improvement comprising:

the XML-based document includes text for plural pages as well as page-information text, wherein the page-information text is delimited by page-information element types that define location in the document of the text for each of the plural pages.

2. An XML-based document according to Claim 1, further comprising page-directory text which includes the page-information text, the page-directory text being delimited by page-directory element types which contain at least one page-information element for each of the plural pages.

3. An XML-based document according to Claim 2, further comprising directory-information text which includes the page-directory text, the directory-information text being delimited by directory-information element types that specify the number of the plural pages and which contains the page-directory elements.

4. An XML-based document according to Claim 3, wherein the directory-information text further includes thumbnail-information text that defines a graphic for each of the plural pages, the thumbnail-information text being delimited by thumbnail-information element types.

5 5. An XML-based document according to Claim 4, further comprising thumbnail-directory text which includes the thumbnail-information text and which is delimited by thumbnail-directory element types.

10 6. An XML-based document according to Claim 3, further comprising document-attribute text delimited by document-attribute element types and that specify attributes of the document.

15 7. An XML-based document according to Claim 1, further comprising document-resource text that specifies a location pointer in the XML-based document for resources used by pages in the XML-based document.

20 8. An XML-based document according to Claim 8, further comprising a directory-table-list element that includes the document-resource text and at least an indirect reference to the page-information text.

25 9. An XML-based document according to Claim 8, further comprising document-directory-table text delimited by document-directory-table types and that provides location information of the directory-table-list text.

30 10. An XML-based document according to Claim 1, wherein the page-information text is included in document-directory information stored in the XML-based document.

 11. An XML-based document according to Claim 10, wherein the document-directory information is stored at or near the end of the XML-based document.

5 12. An XML-based document according to Claim 11, further comprising a directory-exists element delimited by directory-exists element types, the directory-exists elements directly or indirectly defining the location of the document-directory information, the directory-exists element being located at or near the beginning the XML-based document.

10 13. An XML-based document according to Claim 1, wherein the XML-based document is comprised of an SVG-based document.

15 14. An authoring tool for an XML-based document according to any one of Claims 1 to 13.

20 15. An XML-based document according to Claim 14, wherein the authoring tool is comprised of a print driver.

25 16. An XML-based document according to Claim 14, wherein the authoring tool is comprised of a stand-alone application.

30 17. An XML-based document according to Claim 14, wherein the authoring tool is a plug-in to another application program.

25 18. A viewer for an XML-based document according to any one of Claims 1 to 13, wherein the viewer parses the XML-based document based on a current page being viewed and based on the page-information text, so as to render and display the current page.

30 19. An XML-based document according to Claim 18, wherein the viewer is comprised of a stand-alone application.

30 20. An XML-based document according to Claim 18, wherein the viewer is a plug-in to another application program.